Application No. 10/551,663 5 Docket No.: 102907-438-NP (Old);
Amendment dated December 23, 2009 PTI-002-NP (New)
Reply to Office Action of June 23, 2009

## REMARKS

Claims 1-6 are pending in this application. Claim 1 is amended to clarify the subject matter Applicant regards as the invention and claim 4 is amended to correct a typographical error. All claims have been rejected under 35 U.S.C. §103(a) as being unpatentable over US 2003/0077559 by Braunberger et al. ("Braunberger").

The present invention relates to an adaptive learning system that provides an individualized curriculum to a child by building a solid foundation in the subject as quickly as possible, and then moving on to more difficult material. The present invention avoids the summative process of prior art systems that require every child to answer the same questions, and/or number of questions in a particular topic. Instead, the present invention uses an informative process that reacts to the specific information given to it by an individual, using a set of predefined heuristics. See Specification ¶ [0020]-[0022]. In accordance with the present invention, a child's proficiency and instructional need (level of difficulty and appropriate topic category) is determined on a per question basis. This provides each child with a unique and efficient progression through a curriculum map. See Specification ¶ [0036].

In particular, for a particular "bucket," or academic topic, a water level corresponds to the user's proficiency level in that topic. A Question Difficulty Level can then be represented by graduated markings along the height of the bucket's inner wall, ranging from low difficulty near the bottom to high difficulty near the top. Thus, adjusting the amount the user's water level—or question difficulty—is incremented on a question by question basis allows a user to move as quickly as possible through the curriculum in accordance with the user's own capacity for learning. See Specification ¶ [0037]-[0040]. The amount the user's water level is adjusted, as provided in the "predetermined adjustment table," depends on the state level, or the student's consistency in performance for the relevant topic. In one embodiment, when a student-user answers a question correctly, the state level increases by 1, and similarly, if a student-user answers incorrectly, the state level decreases by 1. See Specification ¶ [2121.

As recited in independent claim 1 as amended, the present invention therefore relates to a system having a processor configured to, inter alia, determine an adjustable state level, determine an adjustable water level, determine an appropriate question in accordance with a user's current water level from one or more questions within a threshold range from the user's current water level, and depending on the user's answer to the selected question and on said user's current state level, to adjust the user's water level according to a predetermined adjustment table.

The Braunberger publication discloses and claims a system and method for ensuring that a user on a host system periodically performs educational tasks by suspending a primary application until the user completes a set of educational tasks or criteria (Abstract). Several examples of educational tasks and performance criteria are provided. The frequency in which the educational tasks are presented can be dependent on a student's performance on past education tasks, see ¶ [0024]-[0025], and the percentage of tasks performed correctly can be used to calculate a test score, see ¶ [0036].

The Braunberger publication discloses a system in which the difficulty level of questions and topic presented to the student-user is static, chosen by parent or teacher via input to a configuration GUI, for example, see [0028], [0031], [0078]-[0086], Figure 7. The difficulty level does not change dynamically "depending on the user's answer to said selected question and on said user's current state level" as required by Claim 1. In addition, the Braunberger publication does not teach or suggest a system that will "adjust the user's water level according to a predetermined adjustment table" and the user's state level, or performance consistency, for that topic. Instead, if a user answers a question or percentage of questions at a particular level of difficulty correctly, the testing stops and the primary application resumes. If a user answers incorrectly, the user can request an "easier question." See [0028]-[0036]. There is no provision for moving the user through a curriculum in an interactive, dynamic and efficient manner as described above. On the contrary, since the user can request easier questions to complete his tasks and then resume other activities, the Braunberger publication does not appear to encourage the user to efficiently progress quickly to more difficult topics.

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The Office action states that Braunberger only lacks a specific disclosure of an "adjustable water level as a visual mean for demonstrating user's performance on a specific topic or assigning a threshold range from 0-5" and that it would have been obvious to modify Braunberger's invention to incorporate this visual model. Applicants respectfully traverse this reasoning. Braunberger does not merely lack the "visual" of the water bucket but lacks, *inter alia*, the entire concept of <u>adjusting the incremental change in difficulty</u> ("adjust said user's water level") of each successive question based on a state level, or performance consistency, "depending on the user's answer to said selected question and on said user's current state level" as required by Claim 1.

Therefore, among other things, the Braunberger publication does not disclose or suggest a system having a processor configured to, "depending on the user's answer to said selected question and on said user's current state level, adjust said user's water level according to a predetermined adjustment table." At least for this reason, claim 1 is not obvious in view of the Braunberger publication.

In view of the amendments and remarks set forth above, Applicant submits that independent claim 1 and claims 2-6 dependent therefrom, at least by virtue of their dependency, are patentable over the art of record and respectfully requests withdrawal of the rejections.

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## Conclusion

In light of the foregoing, Applicant respectfully submits that all rejections have been overcome and that the pending claims are now in condition for allowance.

It is believed that no fees are necessitated by the present Response. However, in the event that any fees are due, the Commissioner is hereby authorized to charge any such fees to Deposit Account No. 06-0923. The Commissioner is likewise authorized to credit any overpayment to Deposit Account No. 06-0923.

If the Examiner believes that a telephone conversation with Applicants' attorney would expedite allowance of this application, the Examiner is cordially invited to telephone the undersigned attorney at the number provided below.

Dated: December 23, 2009 Respectfully submitted,

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